

Meeting Description: Michigan Geographic Framework Users Meeting

Date: June 10, 1999 **Time:** 10:00 a.m.

Location: Lewis Cass Bldg., 6th Floor, North Wing, Dept. of Community Health, Director's Conference Room

Scheduled Time			Actual Time		
Start	Stop	Total Hours	Start	Stop	Total Hours
10:00 a.m.	12:00 p.m.	2	10:00 a.m.	12:00 p.m.	2

I. Approval of May Meeting Minutes

There were no changes or corrections made to the May meeting minutes. Laura Tschirhart and Jim Best did not receive the minutes.

II. Geographic Framework Program

A. Michigan Information Center (MIC) Project Update

1. Michigan Accident Location Inventory (MALI) to Geographic Information System (GIS) Conflation (Phase 2) Status

Rob Surber, MIC, distributed a current status map. The map is posted on the web site, which will be updated weekly, and hard copies will still be distributed at the meetings. A total of 57 counties are either complete or underway with linear referencing system road update. There are 11 counties in progress. There are 7 counties that are especially important because they have reached identity point (all of current MALI is accounted for on the map.) There are 39 counties totally complete and out the door.

2. County Seaming

Rob Surber, MIC, reported that the MIC finished seaming the Ottawa and Allegan county line and sent it to John Clark, Michigan Department of Environmental Quality (MDEQ). This is an attempt to give MDEQ and United States Geological Survey (USGS) a clean multiple county framework file to use with the Macatawa Watershed pilot project in attributing the hydrographic features with the River Reach attributes.

Steve Miller, MDEQ, stated that United States Geological Survey (U.S.G.S.) would like to get data when MDEQ has their portion done, even though U.S.G.S. does not have their portion complete.

Rob Surber, MIC, added that the MIC would continue with county seaming. They are trying to get an estimate of time. It doesn't look like an average county line will take a lot of effort to seam, however, there will be exceptions. They will continue to gage the time and will probably have better idea in a month or two as to how it will progress. The MIC began seaming the Tri-County area (Ingham, Eaton, and Clinton counties.)

3. Meeting with Michigan Department of Natural Resources (MDNR) regarding State Park Roads

Gary Bilow, MDNR, reported that MDNR is trying to have a facilities management system for all parks using high-resolution digital ortho photos for the base. As part of the effort, they plan to capture road centerlines and include them in the framework. Positional accuracy is a concern.

Rob Surber, MIC, added that the MIC and MDNR had a technical meeting and will be doing a prototype between offices to look at ways to maintain framework and get new information (roads and trails) into framework. The MIC is interested in the idea of doing work from a more accurate base from a controlled conflation environment, maintaining some of the linkages to the referencing system, repositioning, and adding new things. The goal is a quicker turnaround to get it reintegrated faster and back out onto the street.

Joyce Newell, Michigan Department of Transportation (MDOT), would be interested in getting a federal forest road map depicting public roads. The Federal Forest Service is claiming 10-12,000 miles of roads, 2,000 of them are public roads.

Larry Shaw, MDOT, added that Michigan Technological University has a contract with the Federal Forest Service to Global Positioning System (GPS) roads and bridges. It may be possible to get a map from them.

III. Michigan State Government Geographic Information Policy Council

Rob Surber, MIC, reported that the MIC released the general survey of data being collected for state agencies and will do a follow-up with agencies and who didn't finish it. This Intranet survey for state agencies is available on the web site. It will be based on a log-in where you can go back into entries and modify them. They will also provide statistics and maps showing status by theme. Eventually the data will tie directly into the statewide survey development, which will cover more than state agencies, and is being developed for the National Spatial Data Infrastructure (NSDI) clearinghouse, which covers private and non-profit sectors and will be promoted by IMAGIN. The goal is to have this be a dynamic state survey for people to see and to be an incentive for people to want to be a part of. The problem is that there is no guarantee that people will fill it out. The general survey going out to state agencies will then be a part of a larger survey which will collect the following data: type of GIS activities involved in, type of expertise, resource people in office, metadata and data. The survey will be going out later this summer. It will be going to IMAGIN for review. They are marrying SEMCOG's survey to what the MIC has developed to cover everything. It will not take long to fill out the survey – it is point and click. Some departments are doing a fine job and others haven't been. The MIC has been receiving comments back stating that this is very helpful.

IV. MDNR Projects and Activities

Gary Bilow, MDNR, reported that the innovative partnership with U.S.G.S. to acquire digital ortho photography from NAP photography has been signed. It is in the U.S.G.S.' contract section and MDNR is waiting for it to be returned before they make any announcements. They will be spending \$80,000 to get coverage for Dickinson and Baraga counties. There will probably be up to \$500,000 of U.S.G.S. money available and MDNR will have to match between 25-50% level depending on other agencies' participation. This is a three-year program with up to \$500,000 a year. The MDNR asked for money through their technology fund. The strategy is to fill in the Michigan digital ortho imagery blank spots.

Rob Surber, MIC, asked if the 1992-93 had been acquired statewide.

Gary Bilow, MDNR, responded that they have bits and pieces of it and have been collecting it from different sources. The agreement a couple of years ago was that the MDNR would get complete coverage of the state using 1998-99 NAP photography. The money isn't there to do that, so they are hoping to fill in

Gary Bilow, MDNR, also reported that they have another project with the U.S. Army Corp of Engineers to create digital ortho photo work for the state parks, with Section 22 Planning money (a contribution of \$50,000, to do twenty state parks.) MDOT did the photography and the surveyors are doing the ground control. The Corp is doing the processing of the photography into orthos. The aerial photo contract is for statewide leaf-on project that the MDNR gets about every 10 years. They did the Upper Peninsula in 1997, the northern lower peninsula in 1998, and are currently doing the southern lower peninsula. The aerial photos are black and white. The Virtual Geographic Information Laboratory Group (MDNR's GIS committee) got their projects together for next year and have identified about \$2.5 million worth of GIS projects. They met with the Department of Consumer and Industry Services (CIS) about working with their database of state subdivision plats to map to the 40-acre grid. Twenty-five subdivisions are added per week and the database is updated once a month. The CIS January version is available on the web site.

Rob Surber, MIC, stated that the MIC would be interested in capturing that data. Rob was told that 95% of the subdivisions have been built, but that they don't capture condos.

Gary Bilow, MDNR, added that there are 69,000 records in the database - some are duplicates, so there are probably 65,000 records to go through. They hope to cleanup the multiple entries in the database quickly.

Gary Bilow, MDNR, reported that MDNR also has 25,000 land corner records that they are scanning and building an index, which will be available on the internet.

V. MDOT Projects and Activities

A. Global Positioning System (GPS) Update

Gil Chesbro, MDOT, stated that there is nothing new to report on the status of GPS.

Rob Surber, MIC, stated that at the last meeting there was discussion regarding a proposal to establish one-second stations out in the field. If there is interest in being a partner, contact Larry Christenson, MDOT.

Jim Best, Michigan State Industries (MSI), distributed a current status map showing the status of their work on framework.

Joyce Newell, MDOT, stated that the map indicates putting roadway attributes (legal systems and functional class) on roads and bridges. When validations are complete, the information is sent to MIC. Alcona and Eaton counties have been reintegrated. The more difficult counties were the ones done with Caliper previous to MSI using ArcInfo.

Gil Chesbro, MDOT, also reported that MDOT is trying to get an Internet GIS going in the department. They have a pilot to look at waste sites (i.e. underground gas tanks) that are within right-of-ways. They worked out a deal with MDEQ not to extract the tanks provided they are not leaking or damaged. MDOT does have to keep track of the tanks and must issue permits if construction is done in that area. They plan to put the data on a web site so that the regional engineers will know where the tanks are, who owns the database, who to contact, and how to issue a permit. MDOT hopes to have the pilot available by the end of the summer. There are less than 100 records statewide so the pilot can be done statewide. This will not be linked into Real Estate Management Information System (REMIS).

Joyce Newell, MDOT, reported that Alcona County Road Commission didn't have any GIS software. MDOT prepared a CD using Arc Explorer for Alcona County to use to view what is on framework for their county – they will not have the capability to change data. A copy was also sent to Michigan Technological University so they will be aware of what is available for RoadSoft Users Group. The MIC also has a copy because the questions will be directed to MIC first. The CD will probably be used at the next RoadSoft Users Group meeting.

VI. MIC Projects and Activities

A. Statewide Land Database (SWLDB) – Executive Information System (EIS)

Rob Surber, MIC, stated that the MIC is working under the direction of Michigan Department of Management and Budget (MDMB) and MDNR and working with Michigan State University (MSU) on this project. Bill Enslin, MSU Center Remote Sensing and GIS, demonstrated a prototype to the MDNR and MDMB directors and staff. The comments were very positive. There is more work to be done on the prototype. It will be finalized and sent out to the department representatives, who will see that it is passed on to department personnel to review to see if it meets the needs of users. The product is initially being developed as an Intranet stand-alone application. The product is designed to deal with land (mineral and surface), facilities, and infrastructures – including roads, bridges. It is a general product and is not intended to be used as a day-to-day operation, it is more like a warehouse. It will be updated on an ongoing basis. They have reattributed MSI's data for road ownership and bridges for Eaton County. Bill Enslin, MSU, and staff did a wonderful job and their effort was apparent. Once this is out to the state agencies, they will review, get back comments, establish scope from the wish list and in the fall they will create the initial product. They will be focusing on a unique identification for everything. Roads and bridges are fairly stabilized but facilities are not stabilized. It will help internally to keep data coordinated

Bill Enslin, MSU, commented that there would be challenges for statewide use. In the tri-county area (Clinton, Eaton, and Ingham counties) there is 3-4 gigabytes of data, including air photos and images. There are challenges in how to deliver it to the desktop. There will be differences between what is shown in the demonstration and the final product.

Rob Surber, MIC, stated that the networks for the state departments through Network Operating Center (NOC) are one of the technical issues in addition to the imagery and the LandScan. The purpose is to get the stakeholders to buy in on terms of the direction – what types of things do they want to do. In addition to querying capabilities, there will be reporting capabilities – day-to-day business reports that might be served, for example, the fire report (money from state to local fire departments) and the fixed assets report.

B. Redistricting Status

Rob Surber, MIC, distributed a current status map. The MIC is continuing to map election geography data starting with 1994 data, vote totals, by race, by party, etc. The 1996 and 1998 data will be a data warehouse that will be tied into framework for referencing. The 2000 precincts lock in in February and will update at that time. Once framework and election geography stabilizes, will only have to deal with the changes and not have to rebuild. Department of State (DOS) is interested in this project for on-line election reporting.

Gil Chesbro, MDOT, asked about the relationship between framework and TIGER lines files for the 2000 census. Will there be a one-to-one correlation?

Rob Surber, MIC, will take on the responsibility to recast the 2000 census polygons to framework. In 1990, the census was taken around April and TIGER files came out in the fall of that year. Will probably get prototypes to start looking at development and technical implications. If the data comes in later in 2000, with the counties seamed, they can probably have a specialized group to plug in the data. There will be demand for demographic information referencing back to a variety of things. Will then be able to compare 1990 data to 2000 data.

C. National Pipeline Mapping

Rob Surber, MIC, reported that an announcement came over the wire to establish the coordination at state level of map pipeline for natural gas and hazardous liquids to create repository for the state, the application due date is July 1, 1999. Rob will touch base with interested agencies to check out partnerships. Rob does want to participate and would like to see this tie into framework. When looking at what other states have done, it doesn't appear as though this is that big of a job. Rob should have an idea by next meeting of a plan. If you are interested, contact Rob Surber at (517) 373-7910. More information is available at the following HTML address is: www.rfpa.dot.gov/pa0007a.html

VII. MDEQ Projects and Activities

Steve Miller, MDEQ, reported that they would start working on hydrography. It will be another case of looking at different scales and accuracy of data and see how to fit it together. This is a complex undertaking. They are working with Bill Enslin, MSU, on the Source Water Assessment Program. One of the issues is bringing the data back into the counties into the Michigan Geographic Framework NAD83 where counties have their information in state plane NAD27. MDEQ is trying to get the information up-to-date so that the counties can utilize it and get updated assessments to the state. They are working with Ingham and Kent Counties as a demo.

Rob Surber, MIC, stated that the MIC needs to investigate tagging address geocoding with references so if framework is updated, they can keep track of data overtime. This is one way at the state level to provide hooks and links to data.

Steve Miller, MDEQ, added that at the state level they are trying to implement a method accuracy description and carry it down to the county level. The hope is to be consistent with standards. Also working with LandScan and Mr. Sid compression.

Bill Enslin, MSU Center for Remote Sensing and GIS, commented that the original LandScan is compressed 7-1 statewide for 1992 coverage and it is over 40 gigabytes of compressed data. They took it into Mr. Sid and did different compressions and decided that 30 will run the automatic process to compress the new images. That reduces it from 40 gigabytes to under 10 gigabytes. Some information is lost and data will not be as crisp, but the functionality will be there.

Steve Miller, MDEQ, added that as they serve this out over Intranet, they are trying to keep file size down. They are talking about web enabling, but have not worked out the technical details. They are doing Macatawa Basin as a demonstration now and the intent is to do it for the whole state.

Jeroen Wagendorp, Allegan County, commented that when Allegan County gets the ortho's back from the Corp, they will have to redo their hydrography because nothing will fit. If they have to redo it, they might as well redo to meet or exceed the state's satisfaction.

Steve Miller, MDEQ, stated that the Corp provided 1:12,000 digital ortho quads (DOQs) for the Macatawa Basin. MDEQ is going to look at how much more accuracy it will take to reposition. The intent is to do the whole state. The Corp, MDNR, and others are interested.

Gary Bilow, MDNR, asked as to the status of U.S.G.S.' efforts to create 1:100,000 national hydrography.

Steve Miller, MDEQ, responded that it is not done. U.S.G.S. has been working toward this as a priority.

Rob Surber, MIC, added that Mark Coppersmith, U.S.G.S., said that originally they were going to work on Macatawa Basin to get it done quickly and out the door, but they decided to complete the entire state of Michigan. U.S.G.S. is not going to distribute anything until they are completely satisfied with the product.

VIII. SEMCOG

Rob Surber, MIC, reported for SEMCOG who was not present. The year 2000 aerial photo request for purchase (RFP) was released on June 7. Copies of the RFP are available upon request, contact Steve Perry, SEMCOG. They are doing black and white 1:24,000 scale photography and will produce 9X9 inch prints. They are no longer requesting 1:2,000 Mylar enlargements. SEMCOG recently purchased a high resolution digital copier to make needed enlargements in-house on photo quality stock. They are requesting every other photo negative to be scanned at 1,000 dot per inch (DPI), georeferenced to 7.5 minute quad, edge matched, saved in Mr. Sid format, but will not be ortho rectified. They will be doing some digital referencing of these photos that can be searched and retrieved. Rob is not sure of access and distribution.

Rob Surber, MIC, also distributed an update of SEMCOG's status of the Polygon Boundary Clean-up. They are cleaning up TIGER polygons on framework for their region down to the block level. They have closed most polygons for Minor Civil Divisions (MCD) and census tracts and they working at block level.

IX. Tri-County Regional Planning Commission Projects and Activities

Laura Tschirhart, Tri-County, reported that they did an address matching exercise with framework. The records had street numbers and street names. There were 1,478 total records – most of them matched. Of the 39 with different addresses: 34 had no problems; 2 addresses reported either the Capitol or an intersection; 1 address had 320 S. Walnut which could either be Mason or Lansing - needed ZIP code; 2 addresses had 210 N. Washington (with no street type.)

Rob Surber, MIC, suggested that people utilize the 3rd name in the name file, which has been reserved where postal file differs from official name to assist geocoders. For matching purposes, match the first time by the official name and then pick up additional names where the postal service is calling it one thing or another thing.

Laura Tschirhart, Tri-County, also reported that Jennifer Osborn, Tri-County, is digitizing a comprehensive plan. She is planning to send the future land use and zoning out for review and will send a letter requesting plans from the local government that haven't been received yet.

X. MSU Center for Remote Sensing and GIS Projects and Activities

Bill Enslin, MSU, reported that they continue to work with cleaning and building lake polygons. They have about 20 counties in various stages; 4 counties are complete; 9 counties that they have cleaned and built lake polygons. They have started using old lake inventory atlas for embellishing lake names - through using the atlas, Barry County has about 30 additional lake names that are not in framework and in the tri-county area (Ingham, Eaton, Clinton counties) there are about 15 additional lake names. There are more lakes built into polygons than are actually named. There is an attribute in the database that tells where the lake name came from – framework, geographic names information system, historical lake inventory address, etc.

Rob Surber, MIC, commented that lake names are similar to county drain names. They are all named, but may have to find local name. In Hillsdale County there is a pilot project with the drain commission to populate the names of the drains with local information to find aliases.

XI. County/Local Projects and Activities

Jeroen Wagendorp, Allegan County, reported that there is a lot of activity in Kalamazoo, Allegan, and Ottawa counties. If you want ortho quads for Ottawa County, you can get the Corp version, county version, or earlier Corp version. Ottawa County put \$1.5 million into their GIS. By mid-July they hope to hire a person to run the GIS venture. Ottawa is going external with their parcels. Allegan County hired two high school juniors and they should be set with parcels by the end of summer. Looking at what extent they could rectify old photography to the ortho photography for future use.

Dave Shinavier, Barry County, distributed an up-to-date county map with an index of lakes in acreage. They purchased a Trimble Pro XR. They have one intern starting on Monday. The pilots and benchmarks are sub-meter and most typically sub-foot without post-processing. They are collecting coordinates for remonumented points. They sit on a point for 15 seconds and then they have it. There is problem on gravel roads, but they found ways around that. Next they will drive road centerlines for the county. This will bring them from the 1990 base down to sub-meter and everything else will have to be adjusted accordingly. Section corners and road centerlines will be available.

Rob Surber, MIC, stated that the challenging thing about integration is when collecting linear data and comparing post-processing matching back into a referencing system as opposed to in the field doing GPS conflation. You want to be able to link for loadability to compare other information that is being collected. It is important for long-term reintegration back into the framework. Hopeful to have a pilot project to look at in an ongoing basis – does it make more sense to post-process match conflate or is it better to do it while out there.

Zubair Ahmad, City of Lansing, reported that 42,000 parcels in the city are up and running in their GIS system. They have developed a small-scale application. They have about 310 miles of roads and are using their Pavement Management System (PMS) analysis. They would like to see the city's storm and sewer system developed in the coverage, but there is no funding right now. They would like to see the product Tri-County Regional Planning has developed for Lansing city streets to see how it could be of use to the city or how the city could contribute.

XII. U.S. Census Bureau Regional Office TIGER Update
Nobody in attendance.

XIII. Federal Projects and Activities
Nobody in attendance.

XIV. Other Issues

Rob Surber, MIC, stated that the list serve is up on MIC's home page. If anybody is interested, either let us know and we can add your name or you can sign up yourself on the web site.

Rob Surber, MIC, stated that if anybody has any items they would like added to agenda, please contact our office at (517) 373-7910.

XV. Next Meeting Date

July 8, 1999, 10 a.m. until 12 p.m. in the Lewis Cass building, 6th floor, north wing, Department of Community Health Director's conference room

** If any changes or corrections are to be made to these minutes, please contact the Michigan Information Center at (517) 373-7910.